

# Integrated Care

Better and Cheaper

*By Guus Schrijvers*

With a selection of more than 100 good practices of integrated care

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# Foreword

The future sustainability of health systems is increasingly shaped by ageing populations, urbanisation, and the globalisation of unhealthy lifestyles. Driven by these broad shifts in demographics and disease status, care has become ever more complex and costly. However, the fragmented nature of today's health systems means that they are unable to respond effectively to meet these new demands. The continued and disproportionate focus on specialised and disease-based curative care models undermines the propensity of health systems to provide equitable, high-quality and economically sustainable care.

Across the world, these challenges represent a compelling case for transformational change. New and innovative approaches to care are required in the way health and care services are funded, managed and delivered such that they can simultaneously improve quality in care, support financial sustainability, and retain responsiveness to the needs and demands of people and communities. The move towards a more person-centred approach that engages and empowers people in their own care, combined with a more integrated care delivery model that co-ordinates services more effectively around their needs, has gathered momentum as a policy response to these challenges.

In this book, *Integrated Care: Better and Cheaper*, Professor Guus Schrijvers takes us on a journey to examine the hypothesis that person-centred integrated care can help care systems realise Triple Aim goals of: improving population health; increasing quality of care for the individual; and lowering per capita costs. By reviewing both the theory and practical development of these strategies – including many examples of good practices – the book provides a fresh perspective. By combining the importance of integrated care as a central design feature with the underpinning logic of a person-centred approach, the book sets out some new fundamentals in how better care and outcomes to people with complex needs will likely only be effectively realised by engaging people as partners in care.

There are few resources that provide an overview and understanding of integrated care processes and their potential to deliver Triple Aim objectives, so this book – together with its digital attachment of over one hundred case studies – will provide new thinking to support leading clinicians, policy-makers and scholars interested in understanding the implementation science behind care integration.

Moreover, the book demonstrates that (with the right set of ingredients) it is indeed possible to improve quality of care and outcomes and reduce costs. An important message, both now and for the future, in the challenges that lie ahead.

Dr Nick Goodwin, PhD

Chief Executive, International Foundation for Integrated Care

Editor-in-Chief, *International Journal for Integrated Care*

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# PART 1 INTRODUCTION

# 1 Introduction of the research question

## 1.1 REASONS TO BE PROUD

My intended readership consists of professionals, managers and policy-makers of health services in Europe and elsewhere. They have reasons to be proud of their performances in recent decades. Between 1990 and 2012, life expectancy at birth in OECD<sup>1</sup> countries increased from 74.1 to 79.2. In most countries, progress in the treatment of life-threatening conditions such as heart attacks, strokes and cancer has led to a significant decrease in mortality. Survival rates have also increased in most countries for cervical cancer, breast cancer and colorectal cancer. Improvements also occurred in the field of prevention.<sup>2</sup>

Most OECD countries have maintained universal (or near-universal) coverage for a core set of health services, with the exception of the USA, Bulgaria, Greece and Cyprus, where a significant proportion of the population is uninsured. Still, even in these countries, measures have been taken to provide coverage for the uninsured. On average, across OECD countries, the total number of doctors increased from 2.9 to 3.4 doctors per 1,000 inhabitants between 2000 and 2012. Primary healthcare, and consequently also the accessibility of healthcare, has been improved in many countries. Consumer and patient rights in OECD and EU countries, and elsewhere, are improving.<sup>3</sup> In a growing number of countries, healthcare legislation has been explicitly based on patient rights. More and more patients are now able to access their own medical record.

## 1.2 HOWEVER, THERE ARE CONCERNS

Although these performances are worthy of praise, some public health aims have not been achieved; equal health opportunities, for example. Highly educated men and women are likely to live several years longer and to be in better health than their less educated peers. Between 2009 and 2012, health expenditure in real terms (adjusted for inflation) fell sharply in 50 percent of OECD countries and significantly decelerated in the rest.<sup>4</sup> On average, health spending decreased by 0.6 percent each year,

compared with an annual growth of 4.7 percent between 2000 and 2009. Ham, an English policy watcher, showed what this meant for his country's National Health Service. The financial crisis first resulted in a health services crisis with increased waiting times and too much workload for professionals.<sup>5</sup> Ultimately, these problems resulted in a political crisis. Despite the government's effort to minimise the damage, the crisis resulted in a loss of popular support.

### *The USA has fewer reasons to be proud, but there is hope*

Health professionals, managers and policy-makers in the USA have fewer reasons to be proud, as shown by a 2015 report from the National Research Council.<sup>6</sup>

The report compares health outcomes in the United States with those of 16 comparable, high-income countries such as Australia and many European countries. For many years, Americans have had a shorter life expectancy than people in almost all of the USA's peer countries. This health disadvantage affects all Americans. Even Americans with healthy lifestyles or those who are white, insured, college-educated, and/or in upper-income groups appear to be in worse health than similar groups in other comparable countries. The USA scores low in terms of health and high in terms of finances. The percentage of Gross Domestic Product, an indicator for the national income, in the United States was 16.4 percent in 2013 compared with an OECD average of 8.9 percent. Other American authors arrive at similar findings.<sup>7</sup>

In short, there are reasons to be proud of what has been achieved so far and to have concerns about the future. In the United Kingdom, the financial crisis resulted in a healthcare delivery crisis, which ultimately led to a political crisis. The question of how to prevent these three crises also motivated me to write this book. The following section discusses future trends that frame the context within which health services will function in the years to come.

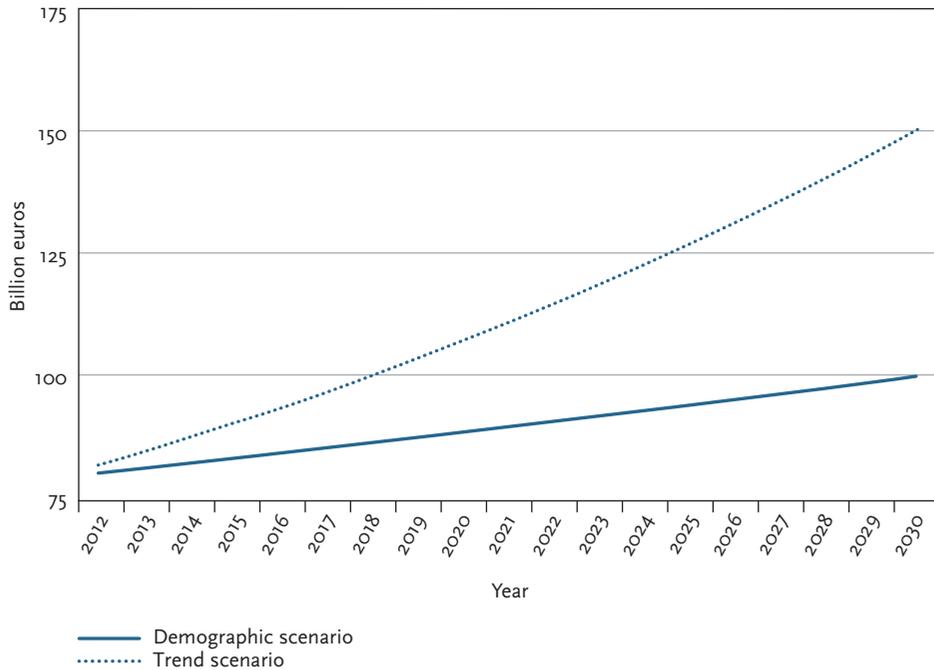
### **1.3 WHAT THE FUTURE WILL BRING TO HEALTH SERVICES**

Healthcare in Europe, and elsewhere, is subject to four developments. Firstly, both the demand for healthcare and the costs of healthcare increase due to an ageing population.<sup>8</sup> However, an ageing population is not the only reason for this increase in demand. This can be illustrated with data from the Netherlands.<sup>9</sup>

If an aging and growing population were the only causes, we would be looking at a demographic scenario (see image 1.1). Between 2012 and 2030 costs at constant prices would then increase from 75 to 100 billion euros. This is an annual growth of 1.2 percent.

However, other factors also lead to a cost increase during that same period. Between 2012 and 2030, the life expectancy of Dutch men will increase with three years, whereas that of Dutch women will increase with two years.<sup>10</sup> These extra years will be characterised by a high demand for care. In addition, the number of

Image 1.1 Trend scenarios for healthcare costs in the Netherlands 2012-2030



Source: RIVM. Een gezonder Nederland. Volksgezondheid Toekomst Verkenning 2014. Retrieved on August 22, 2016 from <http://www.eengezondere nederlandse.nl>.

people with one or more chronic conditions will increase from 5.3 million in 2011 (32 percent of the population) to seven million in 2030 (40 percent). The third factor, which causes a greater increase of healthcare expenditure than demographic changes, is the arrival of expensive medicines. In total, costs do not merely increase to 100 billion euros in 2030, but to 150 billion (see image 1.1). As a percentage of the national income, this boils down to an increase of 14 percent between 2012 and 2019 to 21 percent in 2030. Especially the costs of long-term care will continue to increase.<sup>11</sup>

#### 1.4 THE LIMITED GROWTH OF THE NATIONAL INCOME AND THE COSTS OF HEALTH SERVICES

The second development concerns the limited growth of the national income in the years to come.

The OECD expects GDP-growth for the OECD countries will, on average, be around  $1\frac{3}{4}$  to  $2\frac{1}{4}$  percent per year until 2050.<sup>12</sup> When this percentage is enforced top-down, without innovations in healthcare, the available financial resources for healthcare can increase less rapidly than the demand. This will give rise to longer waiting

lists, greater reliance on emergency care, increased workload for health professionals, loss of quality, corruption and even social unrest, as Ham already observed in his reflection on the United Kingdom.

Another economic aspect of healthcare concerns the share that healthcare expenditure has in the national income.

In theory, it would not be problematic if citizens chose more healthcare in favour of consumer goods – such as holidays – and public services, such as road construction, education and police. All these consumer goods and public services also contribute to health, quality of life and happiness. Economic problems start to arise when citizens start to demand more healthcare *in addition to* all those other goods and services.

This situation will become particularly acute when citizens also start to compensate higher social security contributions with higher wage claims. This will cause exports to become too expensive and could give rise to inflation, which, in turn, erodes pensions and fixed incomes. In addition, other government tasks will be pushed aside due to increasing healthcare expenditure. This is illustrated by the following example from the Netherlands: the money the Netherlands spends on primary education could finance national healthcare for two months.<sup>13</sup> The money spent on police and culture could keep it afloat for one month and one week respectively. The other public sectors will therefore come under pressure as they have to make way for healthcare.

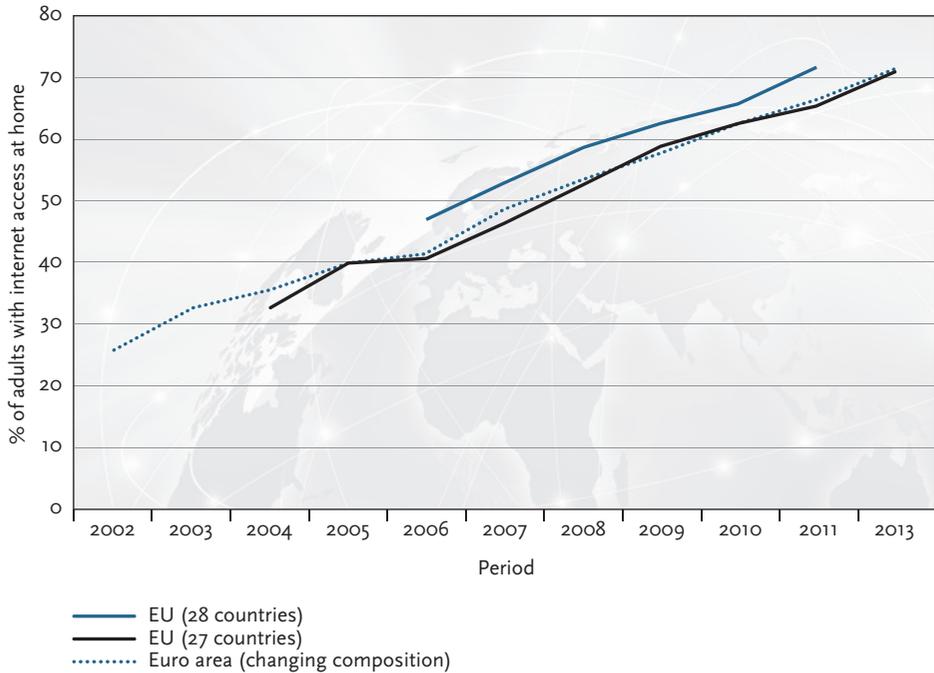
A final argument against a further increase in healthcare costs is that it will jeopardise income solidarity. In 2013, the Dutch government calculated that, if healthcare consumption continues to increase as much as it has done in the past decade, the average annual healthcare consumption of people who have only received primary education will increase from 40 percent of their income in 2011 to 70 percent in 2040.<sup>14</sup> It remains to be seen whether there is any support in the Netherlands for further redistribution of wealth.

### 1.5 DIGITISATION DRASTICALLY CHANGES HEALTHCARE

The third development concerns the digitisation of healthcare. Most Europeans use the internet (see image 1.2). They are able to send emails, surf the web, file away important data, look up medical information and make online appointments. As healthcare patients/clients they often cannot. Among themselves, health professionals are also often not yet able to do so. Digitisation also enables working with sensors, both for our bodies and our houses (*smart houses* and *domotics*).

In addition, it becomes easier to create large data files and to subsequently carry out ‘N=everything research’ based on these files. Chapters 16 and 17 on digitisation and integrated care discuss this development in more detail.

Image 1.2 Percentage of the OECD population with access to the internet



Source: Eurostat. Retrieved on September 25, 2016 from <http://ec.europa.eu/eurostat/tgm/table.do?tab=table&plugin=1&language=en&pcode=tin00075>

## 1.6 GENOMIC SEQUENCING

Digitisation of healthcare also enables a fourth development: genomic sequencing. This method will enable scientists to discover the relation between individual genomes and, for example, cancer or chronic conditions. This will give rise to precision medicine, also known as personalised medicine.<sup>15,16</sup> Digitisation also leads to more precise radiotherapy and more accurate topical administration of medication. Collins, researcher at the National Institute of Health in the USA, has high expectations for the future of precision medicine.<sup>17</sup> Research shows that, even for the same type of cancer, each patient's tumour harbours a unique set of genes that drive malignant growth. Looking at that set of genes often enables researchers to predict how that particular form of cancer will respond to therapy. This enables doctors to match the genomic changes in an individual's tumour with the drugs that counteract those changes. Genomic information can also predict illness in healthy individuals. This approach could lead to more precise prevention and management of chronic diseases.

In summary, this section showed four future trends:

- 1 a growing demand for healthcare services;
- 2 the limited growth of the national income;

- 3 digitisation of healthcare; and
- 4 genomic sequencing for people with cancer or chronic conditions.

However, how does the second trend, that of limited financial growth, relate to the other trends?

### 1.7 THE QUESTION ANSWERED BY THIS BOOK

The increasing demand for care, limited financial resources, digitisation and genomic sequencing have all led to the research question of this book, which reads as follows:

Is it possible to improve population health, increase quality of care for the individual and lower per capita costs of care using person-centred integrated care?

The answer lies in the domains discussed in the following chapters. Chapter 2 introduces the concepts used in this question and frequently used in later chapters. Part 2 with chapters 3 up until 7 describes forms of integrated care that occur in OECD countries. Each chapter ends with a brief sub-answer to the main question of this book. Chapters 8 up until 20 discuss aspects that affect all manifestations of integrated care, such as patients and professionals as partners (part 3), quality (part 4), payment systems (part 5), digitisation and e-health (part 6) and leadership, innovation and research (part 7). These chapters also conclude with the partial answer to the research question. Chapter 21, the final chapter, answers the research question in a few hundred words using arguments that have been substantiated in previous chapters.

### 1.8 HOW TO READ THIS BOOK

This book answers the aforementioned research question. Readers who are in a hurry will suffice with reading final chapter 21. However, I would advise those who do have time to read all chapters. There are many correlations between different manifestations of integrated care. Even payment systems cannot be seen separately from other aspects such as quality of care and digitisation. These correlations motivated me to write one cohesive book rather than 21 separate scientific articles. A chapter in this book is no more than 5000 words. This enables teachers to use one chapter as the basis for a lecture or workshop and add their own examples. This word limit also means managers can use one specific chapter to familiarise themselves with a new form or new aspect of integrated care within the space of a few hours.

The book can also serve as a reference work. Thanks to an extensive table of contents, subject index and digital attachment with good examples, a group of professionals who write a policy memorandum about integrated care can easily look up what is known about a specific subject, a good example or an author. The digital attachment will be updated for at least two years after the publication of this book.

This book contains a large number of illustrative examples. Many of these hail from the Netherlands. They offer an introduction to the world of Dutch health services. These Dutch examples have not been chosen because they are the best in the world, but rather because, as a Dutchman, I am more familiar with them. Examples cannot be adopted thoughtlessly. They require adjustment to existing situations. Chapter 19 about implementation of integrated care discusses this in detail.

Some additional remarks on Dutch health services: internationally, Dutch health services score high. The Netherlands has a lot to offer in terms of successful examples of integrated care. This was one of my reasons for writing this book. However, this country does lag behind when it comes to preventive interventions. Tobacco consumption in the Netherlands is higher than in other European countries<sup>18</sup> and smoking cessation has not been included in the Dutch Health Insurance Act (*Zorgverzekeringswet*). When it comes to cost control, the Netherlands ranks in an average position compared to other OECD countries.<sup>19</sup>

### ***Limitations of this book***

Now that the structure of this book has been fully introduced, it is easy to say what this book does not discuss. Firstly, there are no descriptions of specific target groups (such as people with diabetes) and specific forms of integrated care that focus on these groups. In addition, this book deals with integrated patient care. This means that payment systems (fee-for-service, pay for performance, capitation fee) are only discussed when they are relevant to integrated care. The same goes for financing systems (government interests, social insurance policies, private insurance policies and out-of-pocket payments). Practice teaches us that integrated care can emerge within each payment and financing system. The focus on direct patient care also meant that integration on a national and international healthcare level has not been taken into account. Valentijn and colleagues offer a literature overview of integration at these levels.<sup>20</sup>

Another limitation of this book is that it does not pay explicit attention to the relation between integrated care and the minimisation of health differences. Relevant literature did not provide overview studies that showed integrated care minimises health differences.

I do alert the reader to the fact that the digital attachment contains many good examples of integrated care programmes focused on people with low incomes, a low level of education or belonging to ethnical minorities.

My publisher told me a thin book attracts more readers than a hefty volume. In a way, this book is therefore rather cursory. I have tried to compensate for this by referring to overview publications about specific forms of integrated care, patient self-management and highlighted aspects.

Anyone who, like myself, proposes ideas for future healthcare policy, encounters two problems. Firstly, the long-term effects of the proposed policy are not known, whereas for existing policies, they often are. Secondly, there is no evidence that the proposed policy will be successful. Even though I base my proposals on good, often small-scale examples, there is no guarantee that something that is successful in a small setting will also be successful on a large scale.

It only remains for me to say that I hope the reader will enjoy reading this book and find some inspiration along the way.

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